

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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STATE WATER CONTROL BOARD ENFORCEMENT ACTION

AMENDMENT TO SPECIAL ORDER BY CONSENT

ISSUED TO

TOWN OF CULPEPER

FOR THE

CULPEPER WASTEWATER TREATMENT PLANT (VPDES Permit No. VA0061590)

SECTION A: Purpose

This is an Amendment to a Consent Special Order issued under the authority of Va. Code §§ 62.1-44.15(8d) and 10.1-1185 by the State Water Control Board to the Town of Culpeper on June 21, 2004, regarding the Culpeper Wastewater Treatment Plant, for the purpose of revising certain provisions of that Consent Special Order.

SECTION B: Basis for Amendment

- 1. The Town of Culpeper owns and operates the Culpeper Wastewater Treatment Plant (WWTP) which is located in Culpeper County. The WWTP discharges wastewater into Mountain Run in the Rappahannock River Basin. The discharges are the subject of the Permit, which was issued on October 1, 2004 and expires on September 30, 2009.
- 2. The Board has evidence that the Town of Culpeper may have violated Va. Code § 62.1-44.31 by violating an Order of the Board to complete construction of an upgrade to its WWTP by August 1, 2004. The Board has evidence to indicate that the Town of Culpeper may have violated VPDES Permit Regulation 9 VAC 25-31-50.A and the Permit as follows: (1) by the late submission of groundwater monitoring results; (2) by exceeding Permit limits for chlorine parameters in December 2004 and January, February, March, April, and May 2005; (3) by exceeding its Permit effluent limit for pH in February and March 2005; (4) by exceeding its Permit effluent limits for ammonia in

Consent Special Order Amendment Town of Culpeper Page 2 of 7

April, May, June, and July 2005; and (5) by late submittal of quarterly toxicity data. DEQ issued the following Warning Letter (WL) and a Notices of Violation (NOVs) for the alleged violations: WL No. W2005-03-N-1017 issued March 7, 2005; NOV No. W2005-05-N-0016 issued May 17, 2005; NOV No. W2005-06-N-0012 issued June 10, 2005; NOV No W2005-07-N-0003 issued July 6, 2005; NOV No. W2005-08-N-0003 issued August 5, 2005; and NOV No. W2005-09-N-0004 was issued September 12, 2005.

- 3. A Consent Special Order was issued to the Town of Culpeper on June, 21, 2004 for exceedences of Permit effluent limits for ammonia, total suspended solids, dissolved oxygen, whole effluent toxicity, and chlorine parameters. The Culpeper WWTP was undergoing a \$4.1 million upgrade to allow the WWTP to better handle high flows. Culpeper attributed the Permit limit exceedences to construction activities and high flows through the WWTP.
- 4. The Order required Culpeper to complete construction of the upgrade project by August 1, 2004.
- 5. DEQ received a letter on August 30, 2004 stating that the upgrade project had allegedly been substantially completed as of August 26, 2004. However, a Certificate to Operate (CTO) could not be issued at that time because design problems with the new rotating disk filter did not allow it to handle peak flows.
- 6. On May 25, 2005 DEQ received another letter certifying substantial completion of the upgrade project had been achieved as of May 17, 2005. However, the letter also stated, "To enable the Project to become fully operational, the Town of Culpeper must remove sludge (relocated from equalization lagoon 1 to facilitate the construction schedule) from equalization lagoons 2 and 3 and install two floating aerators."
- 7. Culpeper failed to submit a quarterly groundwater monitoring report which was due January 10, 2005. Culpeper subsequently submitted the report on February 11, 2005. Culpeper had conducted groundwater sampling within the required timeframe, but had neglected to forward the information to DEQ. Culpeper has reviewed the Permit requirements to ensure that the oversight will not be repeated. All subsequent groundwater monitoring reports have been submitted as required.
- 8. Culpeper failed to complete Whole Effluent Toxicity testing in the first quarter of 2005 as required by the Permit. The test was subsequently conducted in early April 2005 and did not reveal a Permit exceedence. Culpeper has reviewed the Permit requirements to ensure that the oversight will not be repeated. All subsequent toxicity testing have been completed as required.

Consent Special Order Amendment Town of Culpeper Page 3 of 7

- 9. By letter dated February 7, 2005 Culpeper notified DEQ that the WWTP had exceeded 95% of the rated WWTP capacity in each of the previous three months. The Town has identified the causes of the excess flows to be ongoing development in and around the Town and substantial inflow and infiltration into the collection system.
- 10. The high flows and excessive sludge in the WWTP have been identified by the Town of Culpeper as the reason for multiple Permit limit exceedences for ammonia, pH, and chlorine.
- 11. The Town of Culpeper has submitted a plan to upgrade and expand the WWTP to increase its treatment capacity. The upgrade and expansion will include: new primary clarifier and secondary clarifier scum pump stations, replacing tertiary sand filter media underdrains, adding mixing to two anaerobic digesters, adding heating to a second digester, providing for simultaneous operation of both existing centrifuges, installing a SCADA system for the WWTP, and providing potable water to the chlorinator.
- 12. Appendix A of this Amendment requires Culpeper to complete the activities required by the June 21, 2004 Consent Special Order, upgrade and expand the WWTP to handle additional flows, and address I/I through a plan and schedule to be submitted by December 1, 2005.

SECTION C: Agreement and Order

Accordingly the Board, by virtue of the authority granted it in Va. Code §§ 62.1-44.15(8a and 8d) and 10.1-1185, orders the Town of Culpeper and the Town of Culpeper voluntarily agrees that:

- 1. The Town of Culpeper shall perform the actions described in Appendix A to this Amendment and comply with the interim limits described in Appendix B to this Amendment. Appendix A and Appendix B to this Amendment supersede the corresponding appendices of the Order. Both the State Water Control Board and the Town understand and agree that this Amendment does not alter, modify, or amend any other provision of the Order and that unmodified provisions remain in effect by their own terms.
- 2. The Town of Culpeper shall pay a civil charge of \$10,000 within 30 days of the effective date of the Amendment in settlement of the violations cited in this Amendment. Payment shall be made by check payable to the "Treasurer of Virginia", delivered to:

Receipts Control
Department of Environmental Quality
Post Office Box 10150
Richmond, Virginia 23240

Either in the transmittal letter or as a notation on the check, the Town of Culpeper shall indicate that

Consent Special Order Amendment Town of Culpeper Page 4 of 7

Commonwealth of Virginia City/County of Culpep

this payment is submitted pursuant to this Consent Order and shall include the Federal Identification Number for the Town of Culpeper.

And it is so ORDERED this day of __ artment of Environmental Quality The Town of Culpeper voluntarily agrees to the issuance of this Amendment. Town of Culpeper Date: Decemen 14, 2005

The foregoing document was signed and acknowledged before me this 44 day of

_, 2005, by J. Brannon Godfrey, who is Town Manager of the Town of Culpeper, on behalf of said town.

My commission expires:

APPENDIX A SCHEDULE OF COMPLIANCE

- 1. The Town of Culpeper shall remove all excess biosolids from the WWTP to appropriate operating volumes in accordance with parameters established in the WWTP's O&M Manual by November 1, 2005.
- 2. Beginning November 1, 2005 and continuing throughout the life of the Amendment, the Town of Culpeper shall calculate a mass balance for solids in the WWTP on a monthly basis to ensure that excess solids are not accumulating in accordance with parameters established in the WWTP's O&M Manual. The mass balance calculations shall be submitted to DEQ along with the Town of Culpeper's monthly DMR.
- 3. The Town of Culpeper shall install the remaining two floating aerators in lagoon 3 in accordance with approved plans and specifications by December 1, 2005.
- 4. By December 1, 2005 the Town of Culpeper shall submit a Permit modification application to DEQ to increase the design flow of the WWTP sufficiently to ensure consistent compliance with Permit requirements.
- 5. By December 1, 2005 the Town of Culpeper shall submit for DEQ review and approval a Preliminary Engineering Report for the expansion which includes calculations demonstrating that the upgrade will increase the capacity of the WWTP to the amount specified in the modified Permit.
- 6. By March 15, 2006, or within 60 days of receiving approval for the Preliminary Engineering Report, whichever occurs sooner, the Town of Culpeper shall submit plans and specifications for the expansion project for DEQ review and approval.
- 7. By September 1, 2007, or within 18 months of receiving a Certificate to Construct the expansion project, whichever occurs sooner, the Town of Culpeper shall complete construction and obtain a Certificate to Operate the expanded facility.
- 8. By October 1, 2007, or within 30 days of completing construction, whichever occurs sooner, the Town of Culpeper shall achieve compliance with final Permit effluent limits.
- 9. By December 1, 2005, the Town of Culpeper shall submit a completed I/I Study to DEQ for approval which contains at a minimum the following components:
 - a. a sanitary sewer map;

Consent Special Order Amendment Town of Culpeper Page 6 of 7

- b. a quantification of inflow and infiltration rates through the use of flow monitoring to assess flow during day and night and wet and dry weather conditions;
- c. an identification of collection system deficiencies through the use of manhole inspections, smoke testing, and closed circuit television inspection;
- d. a cost-effective analysis of potential rehabilitation projects; and
- e. a sewer system rehabilitation plan and schedule.

Upon approval by DEQ, the sewer system rehabilitation plan and schedule shall become an enforceable part of this Amendment.

10. The parties acknowledge that during the period of the upgrade and expansion the Town of Culpeper may experience additional violations of the same Permit limits which necessitated the upgrade. The Town of Culpeper shall operate the WWTP in a manner that produces the best quality effluent of which it is capable in order to minimize such additional violations and minimize potential impacts to water quality.

APPENDIX B

INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

TOWN OF CULPEPER WWTP

During the period beginning with the effective date of this Order and lasting until October 1, 2007, or 30 days after completing construction, whichever occurs sooner, the Town of Culpeper shall monitor and limit the discharge from the WWTP in accordance with VPDES Permit No. VA 0061590, except as specified below. These interim limits shall retroactively apply, if applicable, as of the first day of the month in which this Order becomes effective. These requirements shall be construed in light of the Board's Permit Regulation.

PARAMETER	TER			DISCHARGE LIMITATIONS	LIMITATIO	SN		MON	MONITORING REQUIREMENTS
	Mon	Monthly Average	erage	Weekly Average	verage	Minimum	Maximum	Frequency	Sample Type
	Concentration Loading	ation	Loading	Concentration	Loading				
Ammonia	11 mg/l	J/2	Ŋ	Ŋ	N	NA	N A	1/DAY	24HC
(December-May)	:-May)								
Ammonia	4.1 mg/l	g/l	Ŋ	N	NL	NA	A Z	1/DAY	24HC
(June-November)	ember)								
BOD	30 mg/l	3/1	Ŋ	N	Ŋ	NA	NA	1/DAY	24HC
TSS	30 mg/l	L/a	Z	Ŋ	Ŗ	NA	NA	1/DAY	24HC
NA	Not Applicable								
24HC	A composite sample consisting of a minimum of 24 individual samples obtained at hourly intervals, taken proportional to flow. Individual samples may be of equal volume for flows that do not vary by +/- 10 percent over a 24 hour period.	iple conses may b	sisting of oe of equa	a minimum of 24 Il volume for flow	individual sar	minimum of 24 individual samples obtained at hourly intervals, taken provolume for flows that do not vary by +/- 10 percent over a 24 hour period.	at hourly interva	uls, taken propor hour period.	rtional to flow.
1/DAY	Once per day	•	1						
Z	No Limit								